



pumping reductions were in addition to fish protection measures built into the water quality standards established by the SWRCB. Although the SWP was able to offset some of the water supply impact by increasing pumping rates later in the year, SWP contractors lost access to more than 150,000 AF of water for storage and suffered a significant reduction in water quality.

Water Quality Considerations The quality of SWP water as a drinking water source is affected by a number of factors, most notably by seawater intrusion and agricultural drainage from peat soil islands in the Delta. SWP water contains relatively high levels of bromide and total organic carbon, two elements that are of particular concern to drinking water agencies. Bromide and total organic carbon combine with chemicals used in the water treatment process to form disinfection by-products that are strictly regulated under the federal Safe Drinking Water Act. Wastewater discharges from cities and towns surrounding the Delta also add salts and pathogens to Delta water, which reduce its suitability for drinking and recycling.

Water agencies treat all water to meet stringent state and federal drinking water standards before delivering it to customers. However, source water of poor quality will make it increasingly expensive and difficult to meet such standards. The California Urban Water Agencies (CUWA) retained the assistance of a panel of drinking water quality and treatment experts to evaluate the source water quality that would be needed to allow agencies treating Delta water to comply with future drinking water regulations under a plausibly conservative regulatory scenario. The expert panel identified target bromide and total organic carbon concentrations of 50 parts per billion (ppb) and 3 parts per million (ppm), respectively. By comparison, the average bromide concentration of SWP water is 290 ppb, about six times the target level. The average concentration of total organic carbon in SWP water is about 3.3 ppm, about ten percent above the target level.

Actions to protect Delta fisheries have exacerbated existing water quality problems by forcing the SWP to shift its diversions from the springtime to the fall, when salinity and bromide levels are higher. Closure of the Delta Cross Channel gates to protect migrating fish has also degraded SWP water quality by reducing the flow of higher quality Sacramento River water to the SWP pumps.

#### *Current Supplies*

SWP delivery contracts were amended in 1995 to reflect principles developed under the December 1994 Monterey Agreement. Under the Monterey amendments, all SWP supplies are allocated to contractors in proportion to their contractual entitlements. Metropolitan's approximately 48 percent share of total SWP contract entitle-

ments entitles it to a proportionate share of SWP supplies. Metropolitan estimates that existing SWP facilities, operated in accordance with the 1995 Water Quality Control Plan, will produce about 1.2 MAF in a dry year and 2.7 MAF a year on average. Metropolitan's proportionate share of dry year and average year SWP supplies is estimated at 0.6 MAF and 1.35 MAF, respectively.

The Monterey Agreement includes a number of other provisions, which allow for the improved management of SWP supplies. The agreement allows contractors to store SWP water outside their service areas for later use and provides contractors such as Metropolitan, that pay for terminal reservoirs, access to additional storage. Other provisions include the elimination of a permanent shortage provision that existed in the original SWP contracts, the transfer of Kern Water Bank lands to two contractors, and the sale of 130,000 AF of agricultural contractor entitlements to urban contractors. DWR's implementation of the Monterey Agreement has been challenged by the Planning and Conservation League and others. On September 15, 2000, the Third District Court of Appeal reversed a trial court ruling for DWR and ordered a new environmental impact report and a trial on the validity of the agreement. DWR has filed an appeal asking the California Supreme Court to review the appellate court decision.

#### *Future Supplies and the CALFED Bay-Delta Program*

Work being done by the CALFED Bay-Delta Program is expected to provide the greatest opportunity for SWP supply reliability and water quality improvements, though presently the outcome is uncertain. The state and federal governments organized the CALFED Program in 1995 to develop a comprehensive long-term solution to the ecosystem, levee stability, water quality and water supply reliability problems affecting the Bay-Delta system. The CALFED Program began its transition from planning to implementation in June 2000 with the release of a document entitled, California's Water Future: A Framework for Action (Framework). The Framework, which focuses on the first seven years ("Stage 1") of what CALFED envisions to be a 30-year program, outlines a number of specific steps to improve the quality and reliability of Bay-Delta water supplies, increase the efficient use of water throughout the state, restore the Bay-Delta ecosystem, stabilize Delta levees, and foster the water transfer market. The Framework was followed in July 2000 by a final programmatic environmental EIS/EIR that sets the stage for implementation of the CALFED Program. Three separate legal challenges were filed during the 30-day period following the certification of the EIS/EIR. It is not clear at this time what impact those legal challenges will have on the implementation of the CALFED Program.

The elements of the CALFED Program that have the greatest potential for increasing the reliability and quality of SWP supplies involve improvements to the existing Delta conveyance system, including expansion of the permitted capacity of the SWP pumping plant from its current level of 6,680 cfs to 8,500 cfs and ultimately to